

10 DEC 2001

By Express Mail # EL 793472389

FORM PTO-1390 (REV 10-94)	U S DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE			DOCKET #: 33900-90PUS
TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A FILING UNDER 35 U.S.C. 371				
				10/009936
				U.S. APPLICATION NO. (If known, see 37 CFR 1.5)
INTERNATIONAL APPLICATION NO PCT/FR00/01940	INTERNATIONAL FILING DATE July 06, 2000		PRIORITY DATE CLAIMED July 08, 1999	
TITLE OF INVENTION Intraocular Implant				
APPLICANT(S) FOR DO/EO/US Gilles BOS; Denis GANTIN				
<p>Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:</p> <ul style="list-style-type: none"> 1. <input checked="" type="checkbox"/> This is a FIRST submission of items concerning a filing under <u>35 U.S.C. 371</u>. 2. <input type="checkbox"/> This is a SECOND or SUBSEQUENT submission of items concerning a filing under 35 U.S.C. 371 3. <input checked="" type="checkbox"/> This express request to begin national examination procedures (35 U.S.C. 371(f)) at any time rather than delay examination until the expiration of the applicable time limit set in 35 U.S.C. 371(b) and PCT Articles 22 and 39(1). 4. <input checked="" type="checkbox"/> A proper Demand for International Preliminary Examination was made by the 19th month from the earliest claimed priority date. 5. <input checked="" type="checkbox"/> A copy of the International Application as filed (35 U.S.C. 371(c)(2)) <ul style="list-style-type: none"> a. <input checked="" type="checkbox"/> is transmitted herewith (required only if not transmitted by the International Bureau). b. <input type="checkbox"/> has been transmitted by the International Bureau. c. <input type="checkbox"/> is not required, as the application was filed in the United States Receiving Office (RO/US) 6. <input checked="" type="checkbox"/> A translation of the International Application into English (35 U.S.C. 371(c)(2)). 7. <input checked="" type="checkbox"/> Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3)) <ul style="list-style-type: none"> a. <input type="checkbox"/> are transmitted herewith (required only if not transmitted by the International Bureau). b. <input type="checkbox"/> have been transmitted by the International Bureau. c. <input type="checkbox"/> have not been made; however, the time limit for making such amendments has NOT expired. d. <input checked="" type="checkbox"/> have not been made and will not be made. 8. <input type="checkbox"/> A translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)). 9. <input checked="" type="checkbox"/> An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)). 10. <input type="checkbox"/> A translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)). 				
<p>Items 11. to 16. Below concern other document(s) or information included:</p> <ul style="list-style-type: none"> 11. <input checked="" type="checkbox"/> An Information Disclosure Statement under 37 CFR 1.97 and 1.98. 12. <input checked="" type="checkbox"/> An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included. 13. <input checked="" type="checkbox"/> A FIRST preliminary amendment. <ul style="list-style-type: none"> <input type="checkbox"/> A SECOND or SUBSEQUENT preliminary amendment. 14. <input type="checkbox"/> A substitute specification. 15. <input type="checkbox"/> A change of power of attorney and/or address letter. 16. <input checked="" type="checkbox"/> Other items or information (<i>specify</i>): Int'l Preliminary Examination Report, Int'l Search Report, PCT Request 				

JC05 Rec'd PTO/PWPTO

ATTORNEY DOCKET NUMBER
33900-90PUS

U.S. APPLICATION NO. (If known, see 37 CFR 1.15)
10/089936

INTERNATIONAL APPLICATION NO.
PCT/FR00/01940

17. [x] The following fees are submitted:

Basic National Fee (37 CFR 1.492(a)(1)-(5)):

Search Report has been prepared by the EPO or JPO	\$890.00
International preliminary examination fee paid to USPTO (37 CFR 1.482).....	\$710.00
No international preliminary examination fee paid to USPTO (37 CFR 1.482) but international search fee paid to USPTO (37 CFR 1.445(a)(2))	\$740.00
Neither international preliminary examination fee (37 CFR 1.482) nor international search fee (37 CFR 1.445(a)(2)) paid to USPTO	\$1040.00
International preliminary examination fee paid to USPTO (37 CFR 1.482) and all claims satisfied provisions of PCT Article 33(2)-(4).....	\$100.00

ENTER APPROPRIATE BASIC FEE AMOUNT =

\$ 890.00

Surcharge of \$130.00 for furnishing the oath or declaration later than [] 20 [] 30 months from the earliest claimed priority date (37 CFR 1.492(e)).

\$

Claims

Number Filed

Number Extra

Rate

Total Claims

8 - 20 =

0

x \$18.00

\$

Independent Claims

1 - 3 =

0

x \$84.00

\$

Multiple dependent claim(s) (if applicable)

+ \$280.00

\$

TOTAL OF ABOVE CALCULATIONS =

\$ 890.00

Reduction of $\frac{1}{2}$ for filing by small entity, if applicable.

\$

SUBTOTAL =

\$ 890.00

Processing fee of \$130.00 for furnishing the English translation later than [] 20 [] 30 months from the earliest claimed priority date (37 CFR 1.492(f)).

\$

+

TOTAL NATIONAL FEE =

\$ 890.00

Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by the appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property

\$ 40.00

+

TOTAL FEES ENCLOSED

\$930.00

Amount to be refunded:

\$

charged:

\$

- a. [x] Two check(s) in the amount(s) of \$ 890.00 and \$ 40.00 to cover the above fees are enclosed.
- b. [] Please charge my Deposit Account No. 03-2412 in the amount of \$ _____ to cover the above fees. A duplicate copy of this sheet is enclosed.
- c. [x] The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 03-2412. A duplicate copy of this sheet is enclosed.

NOTE: Where an appropriate time limit under 37 CFR 1.494 or 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the application to pending status.

SEND ALL CORRESPONDENCE TO:

Martin B. Pavane

Cohen, Pontani, Lieberman & Pavane
551 Fifth Avenue, Suite 1210
New York, New York 10176

Martin B. Pavane

Registration Number: 28,337 December 10, 2001
Tel: (212) 687-2770

10/009936

JC05 Rec'd PCT/PTO 10 DEC 2001

By Express Mail # EL 793472389 · December 10, 2001

Attorney Docket # 33900-90PUS

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re National Phase PCT Application of

Gilles BOS et al.

International Appln. No.: PCT/FR00/01940

International Filing Date: July 06, 2000

For: Intraocular Implant

PRELIMINARY AMENDMENT

Assistant Commissioner for Patents

Washington, D.C. 20231

BOX PCT

SIR:

Prior to examination of the above-identified application please amend the application as follows:

In the Claims:

Please amend claims 3, 4 and 5 and add new claims 6, 7 and 8 as follows:

3. (Amended) An implant according to claim 1 wherein the spherical cap, on which are disposed the posterior optical surface of the optical portion and the posterior faces of the extensions, has a radius lying in the range 11 mm to 13 mm.

4. (Amended) An implant according to claim 1, wherein each haptic portion forms an angle a lying in the range 5° to 12° relative to the optical plane and directed towards said anterior face.

5. (Amended) An implant according to claim 1, characterized in that the anterior optical surface is bounded by a circle having a diameter D0 that is less than the diameter D1.

6. (New) An implant according to claim 2, characterized in that the anterior optical surface is bounded by a circle having a diameter D0 that is less than the diameter D1.

7. (New) An implant according to claim 3, characterized in that the anterior optical surface is bounded by a circle having a diameter D0 that is less than the diameter D1.

8. (New) An implant according to claim 4, characterized in that the anterior optical surface is bounded by a circle having a diameter D0 that is less than the diameter D1.

REMARKS

This preliminary amendment is presented to place the application in proper form for examination and to eliminate multiple dependency from the present claims. No new matter has been added. Early examination and favorable consideration of the above-identified application is earnestly solicited.

By Express Mail # EL 793472389 · December 10, 2001
Any additional fees or charges required at this time in connection with the
application may be charged to our Patent and Trademark Office Deposit Account No. 03-2412.

Respectfully submitted,

COHEN, PONTANI, LIEBERMAN & PAVANE

By: _____


Martin B. Pavane
Reg. No. 28,337
551 Fifth Avenue, Suite 1210
New York, N.Y. 10176
(212) 687-2770

7 December 2001

INTRAOOCULAR IMPLANT

The present invention relates to an intraocular implant of the "square-edged" type.

Intraocular implants are well known. They are essentially constituted by a substantially circular optical portion and by a haptic portion which serves to hold the optical portion inside the eye in such a manner that the optical axis of the optical portion of the implant coincides with the optical axis of the eye. The free ends of the haptic portion bear against the inside wall of the eye in order to develop a resilient return force ensuring that the implant is held in place.

One of the main uses of such intraocular implants consists in putting the implant in the capsular bag after ablation of the lens during a cataract operation.

It is known that cellular proliferation after cataract surgery is the main post-operative complication of that type of surgery. Such cellular proliferation can cause the posterior portion of the capsular bag to become completely opaque. It is then necessary to perform capsulotomy using an ND-Yag laser.

According to data provided by the literature in this matter, the capsulotomy rate can be as high as 50% within 3 years from the operation, in particular with implants made of rigid material of the PMMA type.

Studies conducted in particular by Nishi et al. which are the subject of a publication in the "Journal of Cataract Refract Surgery", volume 25, April 1999, seem to indicate that it is possible to prevent the cells proliferating on the posterior capsule by means of the edge of the optical portion of the implant acting on the posterior capsule, when the optical portion includes a "square" edge. The term "square edge" has been adopted to define the optical-portion edges having an edge surface which forms an angle of close to 90 degrees ($^{\circ}$) relative to the optical surface and which retains a sharp appearance.

In addition, it is known that in intraocular implants, which are now often made in a single piece, the haptic portion is connected to the periphery of the optical portion via a "connection zone". The term
5 "single-piece implant" refers to an implant made as a single piece, even if the optical and the haptic portions are made of different materials. For the implants on which the above-mentioned studies were based, the haptic portion is constituted by two loops of narrow width such
10 that the connection zones constitute a very small percentage only of the entire periphery of the optical portion. Under such circumstances, it will be understood that the square edge of the optical portion is effective in preventing cells from proliferating on the posterior
15 capsule because the square optical edge is interrupted only in zones of very limited length corresponding to the connection zones. However, such zones do allow cells to proliferate.

It will be understood that the problem is even
20 greater where the connection zone(s) represent a significant percentage of the total length of the periphery of the optical portion. In the connection zone(s), proliferation cannot be prevented since the optical portion does not have square edges. Implants
25 having connection zone(s) that represent a significant fraction of the periphery of the optical portion are becoming more and more common, in particular when single-piece implants are made of a flexible material of the "hydrogel" type or of the "silicone" type. That type of
30 connection zone can also be found in implants made of a rigid material, e.g. of the PMMA type, when the haptic contact portion for contact with the inside wall of the eye is constituted substantially by a ring shape connected to the optical portion by a single
35 substantially radial arm having a width that is necessarily relatively great to ensure a suitable

connection between the optical portion and the contact ring of the haptic portion.

It should also be recalled that the surgical practice of putting the implant in place inside the eye is tending to make use of an incision in the cornea that is of smaller and smaller size. When designing intraocular implants, it is therefore necessary to ensure that the overall thickness of the implant remains small so as to enable the implant to be implanted through an incision of small size, with this constraint applying both to the optical portion and to the haptic portion and even to the connection between these two portions. This is particularly, but not exclusively, true of implants having an optical portion that is made of a flexible material enabling the optical portion to be folded on a diameter.

An object of the present invention is to provide an intraocular implant for a capsular bag, the implant being of the square-edged type, thus enabling the proliferation of cells on the posterior capsule to be effectively prevented, in particular in the case where the connection zone(s) for connecting the haptic portion to the optical portion are of significant length, while the thickness of the implant is kept as thin as possible.

To achieve this object, the invention provides an intraocular implant for a capsular bag, which implant comprises an optical portion presenting an anterior optical surface and a posterior optical surface, and at least one haptic element, each haptic element presenting a connection zone at the periphery of the optical portion, said implant being characterized in that:

outside the connection zones, the optical portion further comprises a cylindrical side face of diameter D1 connected to the posterior optical surface of the optical portion and parallel to the optical axis of the implant, the length of the side face along the axis being equal to h;

the posterior optical surface is bounded by a circle of diameter D1;

and in that it further comprises, in each connection zone, a radial extension presenting an anterior face, a posterior face, and a side face substantially disposed on a ruled surface of diameter D2 where $D2 > D1$, and presenting a length h' in the direction of the axis, said length h' being substantially equal to h ;

the posterior face of each extension is disposed on the spherical cap containing the posterior optical surface;

each haptic element being connected to the optical portion via the anterior face of the corresponding extension, on the outside of the anterior optical surface, whereby each extension constitutes a step formed by the offset between the posterior optical surface of the optical portion and the connection zone of the haptic element, the side face of each extension forming a square-edged portion with the posterior optical surface.

It will be understood that because of the presence of radial extension(s) at the connection zone(s), which by means of their side walls constitute respective steps resulting from the offset between the posterior optical surface of the optical portion and the connection zone of the haptic element, continuity of the square edge is obtained over the entire periphery of the optical portion. In addition, the fact that the "root(s)" of the haptic portion(s) is/are connected to the anterior face of the extension(s) prevents any increase in the overall thickness of the implant.

In a preferred implementation, the spherical cap, on which are disposed the posterior optical surface of the optical portion and the posterior faces of the step-forming extensions, has a radius lying in the range 11 millimeters (mm) to 13 mm.

The studies performed for developing the present invention have shown that it is this diameter that

provides the best contact between the posterior capsule and the posterior optical surface of the implant, thus preventing cells from proliferating. This ensures that the posterior capsule, which is very fine, being about 5 microns (μm) thick, is tensioned in the zone defined by contact with the square edge of the implant. The risks of folds forming in the posterior capsule and thus the risks of cells proliferating along said folds are thus avoided.

Also preferably, the haptic portion(s) form(s) an angle α lying in the range 5° to 12° relative to the optical plane and directed towards the anterior face of the implant.

This tilt tends to press the posterior optical surface of the implant and the posterior face of the step-forming extensions against the posterior capsule.

Other characteristics and advantages of the invention will appear better on reading the following description of embodiments of the invention given as non-limiting examples. The description refers to the accompanying figures, in which:

Figure 1A is a front view of a first intraocular implant of the invention;

Figure 1B is a side view of the implant of Figure 1A;

Figure 1C is a fragmentary view of Figure 1B showing in more detail the connection between the haptic portion and the optical portion of the implant;

Figure 2A is a front view of a second embodiment of an implant having square edges when viewed from the front; and

Figure 2B is a side view of the implant of Figure 2A.

With reference firstly to Figure 1A, which shows an intraocular implant designed to be placed in the capsular bag, it can be seen that said intraocular implant comprises an optical portion 10 presenting a circular

periphery 10a, and two haptic elements respectively referenced 12 and 14. The haptic elements 12 and 14 are connected to the periphery 10a of the optical portion via connection zones which are indicated by double-headed arrows 16 and 18. It can also be seen that the periphery 10a is free over the remainder of its length, as indicated by double-headed arrows 20 and 22. In these zones, the side wall 10a of the optical portion 10 is substantially cylindrical and is connected to the posterior optical surface in order to form the "square edge", said side wall extending towards the inner optical surface.

As already explained, it is easy to provide a square edge for the free zones of the periphery 20 and 22. The embodiment of the invention which enables a square edge to also be obtained in the connection zones 16 and 18, while preventing any increase in the overall thickness of the implant, is described below in more detail, with reference more particularly to Figures 1B and 1C.

Figure 1B shows the anterior optical surface 24 and the posterior optical surface 26 which define the optical portion 10. The anterior optical surface 24 is constituted by a concave or convex spherical cap and is bounded by a circle of diameter D0 centered on the optical axis XX' of the implant. The posterior optical surface 26 is bounded by a circle of diameter D1 which is preferably greater than D0. The circle of diameter D1 constitutes the physical boundary of the optical portion or optical edge outside the connection zones. The posterior optical surface 26 is convex or plane.

To enable the square edge to be formed in the connection zones 16 and 18, radial extensions 30 and 32 are provided in said connection zones, facing the connection zones, as shown more clearly in Figure 1C. Each extension 30 or 32 comprises an anterior face 30a, a posterior face 30b, and a side face 30c which together constitute a step as described below, thereby, with the

posterior face 30b, constituting the square edge in the connection zone. Furthermore, the posterior face 30b of the extension 30 is disposed on the same spherical cap as the posterior optical surface 26, the spherical cap
5 having a radius R1. The side face 30c of the extension 30 which forms part of the step and the square edge is substantially disposed on a ruled surface of axis XX' and of diameter D2 that is greater than the diameter D1 defining the posterior optical surface 26. The ruled
10 surface can be compared to a cylinder, a cone, a truncated cone, etc. On the portions of its periphery 10a corresponding to the free zones 20 and 22, the optical edge presents a length h in the direction of the axis XX'. In the extension zones 30 and 32, the step
15 constituted by the side wall 30c presents a length h' in the direction of the axis XX', which length is of course slightly shorter than h.

Figure 1C also shows connection of the haptic element 14 to the periphery of the optical portion.
20 Connection of the haptic element 12 is identical. The root 34 of the haptic element 14 is connected to the anterior face 30a of the extension 30, on the outside of the anterior optical surface 24, i.e. on the outside of the circle of diameter D0. Thus, the optical properties
25 of the optical portion are not altered since the roots 34 of the haptic portions are on the outside of the anterior optical surface. Conversely, since the roots are connected to the anterior faces of the extensions 30 and 32, they do not increase the overall thickness of the
30 implant, while making possible the presence of steps 30 and 32 which define the square edges in the connection zones by means of their side faces 30c and their posterior faces 30b.

In a preferred embodiment, the diameter D0 is about
35 5 mm, the diameter D1 is about 6 mm, and the diameter D2 is about 6.5 mm. The length h' corresponding to the steps in the connection zones is not less than 120 μm and

preferably lies in the range 120 μm to 200 μm . As a result, the optical edge of length h is slightly greater than that value.

The studies performed show that said length h' of
5 the step is sufficient to obtain the desired result, i.e. to prevent cells proliferating on the posterior capsule. Said length h , h' is linked to the size of cells that are capable of proliferating on the posterior capsule.

This result is further improved due to the fact that
10 the radius R_1 preferably lies in the range 11 mm to 13 mm, thereby ensuring the best possible contact with the posterior capsule, thus tensioning said capsule and preventing any risk of folds forming. With the radius of
15 the posterior optical surface defined in this way, the power of the implant is determined by appropriately selecting the radius of the anterior optical surface. This is possible for standard optical powers for an implant.

As shown more clearly in Figure 1B, the haptic arms
20 12 and 14 present, preferably relative to the optical plane PP' , an angle of tilt α that lies in the range 5° to 12°. The angle α is preferably close to 10°. In Figure 2B, its value is 9.5°. This tilting of the haptic arms towards the front, tends to press the posterior
25 optical surface, with its extensions, more effectively against the posterior capsule.

In this embodiment, the implant is in a single piece and is made of a flexible material. Each haptic element is constituted by two arms connected together at their
30 contact end. The two arms include a common connection zone.

The implant 50 shown in Figures 2A and 2B differs from the implant in Figures 1A and 1C only in the shape of its haptic portion. The haptic portion is constituted
35 by two haptic assemblies 52 and 54 each formed by two haptic members 56 & 58 and 60 & 62 connected to the periphery of the optical portion 64. In this case, there

are thus four connection zones corresponding to four haptic members. A radial extension is situated in each connection zone, the radial extensions being referenced 66, 68, 70, and 72. The radial extensions 66, 68, 70, 5 and 72 have exactly the same shape as the two radial extensions 30 and 32 in Figures 1A and 1C.

The implant can be made either of a rigid material such as PMMA, or of a flexible material such as silicone or acrylics. For a flexible material, hydrophobic or 10 hydrophilic pHEMA can be used.

CLAIMS

1/ An intraocular implant for a capsular bag, the implant comprising:

5 an optical portion (10) presenting an anterior optical surface (24) and a posterior optical surface (26);

10 at least one haptic element (12, 14), each haptic element presenting a connection zone (16, 18) at the periphery of the optical portion, which zone extends over a significant portion of the periphery of the optical portion, said implant being characterized in that:

15 outside the connection zones (16, 18), the optical portion further comprises a cylindrical side face of diameter D1 connected to the posterior optical surface of the optical portion and parallel to the optical axis of the implant, the length of the side face along the axis being equal to h;

20 the posterior optical surface is bounded by a circle of diameter D1;

25 and in that it further comprises, in each connection zone, a radial extension (30, 32) presenting an anterior face (30a), a posterior face (30b), and a side face (30c) substantially disposed on a ruled surface of diameter D2 where $D2 > D1$, and presenting a length h' in the direction of the axis, said length h' being substantially equal to h;

30 the posterior face (30b) of each extension is disposed on the spherical cap containing the posterior optical surface;

35 each haptic element (12, 14) being connected to the optical portion (10) via the anterior face (30a) of the corresponding extension, on the outside of the anterior optical surface (24), whereby each extension constitutes a step formed by the offset between the posterior optical surface (26) of the optical portion and the connection zone of the haptic element, the side face (30c) of each

extension forming a square-edged portion with the posterior optical surface.

2/ An implant according to claim 1, characterized in that
5 the lengths h and h' of the side faces (30c) in the direction of the optical axis are not less than 150 μm .

3/ An implant according to claim 1 or 2, characterized in that the spherical cap, on which are disposed the
10 posterior optical surface (26) of the optical portion and the posterior faces of the extensions (30b), has a radius lying in the range 11 mm to 13 mm.

4/ An implant according to any one of claims 1 to 3,
15 characterized in that the haptic portion (12, 14) forms an angle α lying in the range 5° to 12° relative to the optical plane and directed towards the anterior face.

5/ An implant according to any one of claims 1 to 4,
20 characterized in that the anterior optical surface (24) is bounded by a circle having a diameter D0 that is less than the diameter D1.

A B S T R A C T

INTRAOCCULAR IMPLANT

5 The invention relates to an intraocular implant comprising an optical portion presenting an anterior optical surface (24) and a posterior optical surface (26), and at least one haptic element (12, 14), each haptic element presenting a connection zone at the
10 periphery of the optical portion. Outside the connection zones, the optical portion further comprises a cylindrical side face of diameter D1 connected to the posterior optical surface of the optical portion. The posterior optical surface (26) is bounded by a circle of diameter D1. In each connection zone, the implant
15 comprises a radial extension (30) presenting an anterior face (30a), a posterior face (30b), and a side face (30c) substantially disposed on a ruled surface of diameter D2 where $D2 > D1$, and presenting a length h' in the
20 direction of the axis, said length h' being substantially equal to h . The posterior face (30b) of each extension is disposed on the spherical cap containing the posterior optical surface. Each haptic element (12, 14) is connected to the optical portion (10) via the anterior
25 face (30a) of the corresponding extension, on the outside of the anterior optical surface (24).

30

Translation of the title and the abstract as they were when originally filed by the Applicant. No account has been taken of any changes that may have been made
35 subsequently by the PCT Authorities acting ex officio, e.g. under PCT Rules 37.2, 38.2, and/or 48.3.

1/3

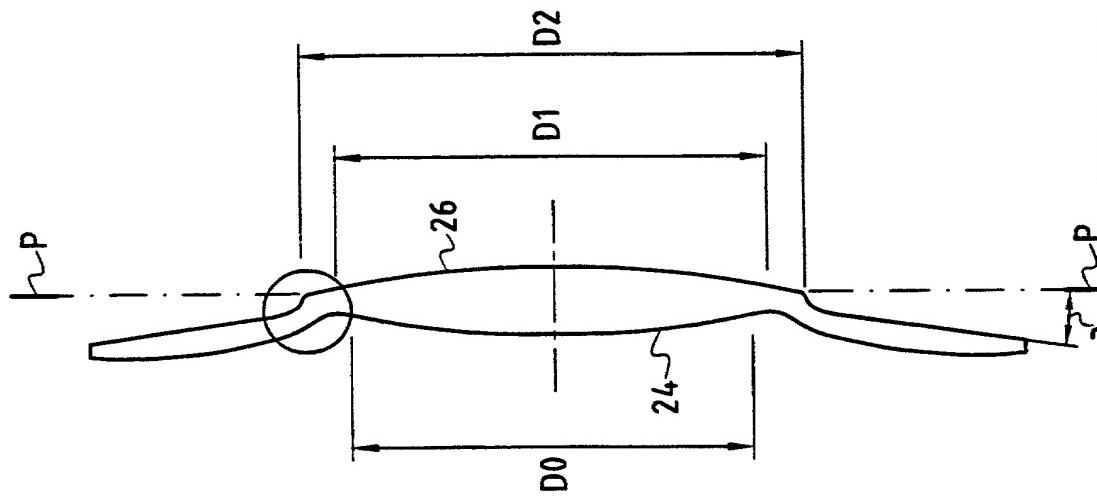


FIG. 1B

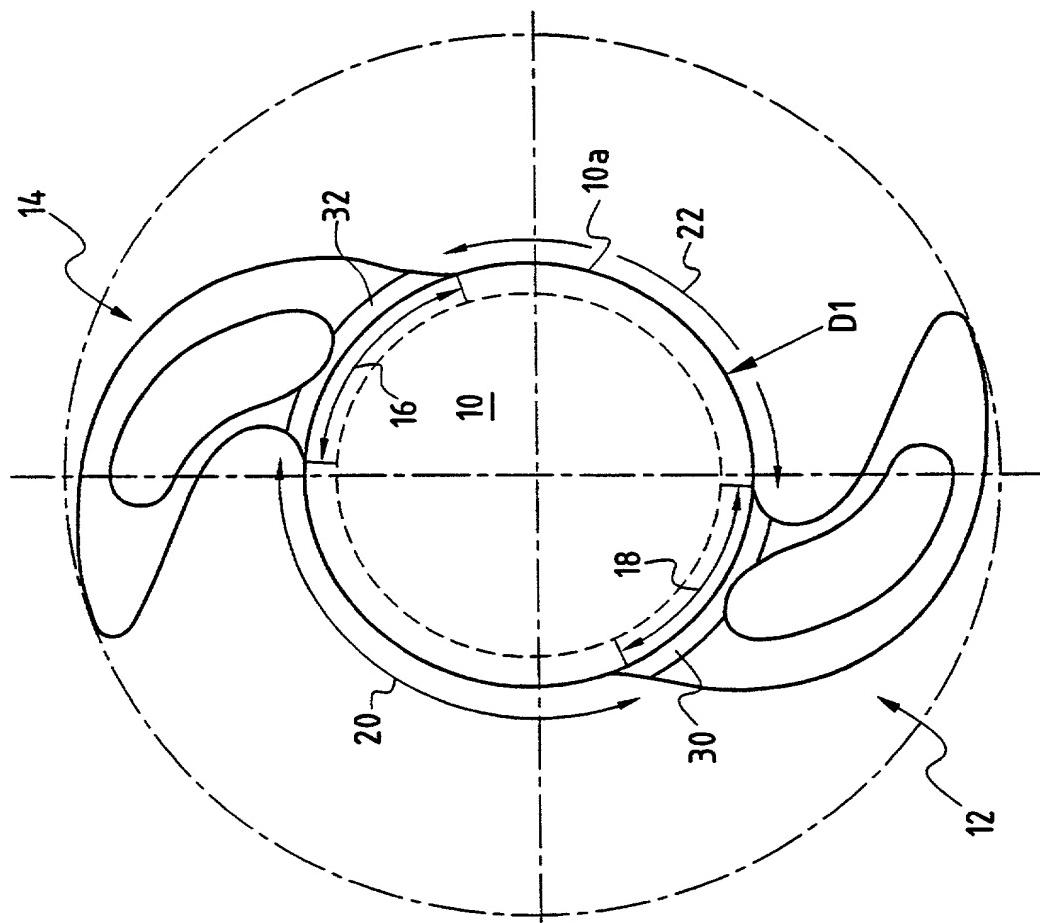


FIG. 1A

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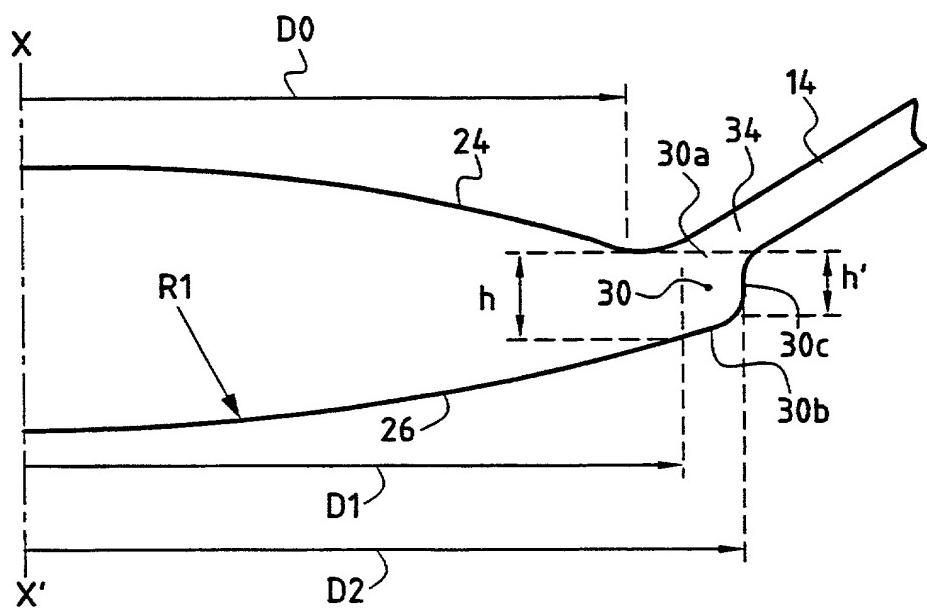
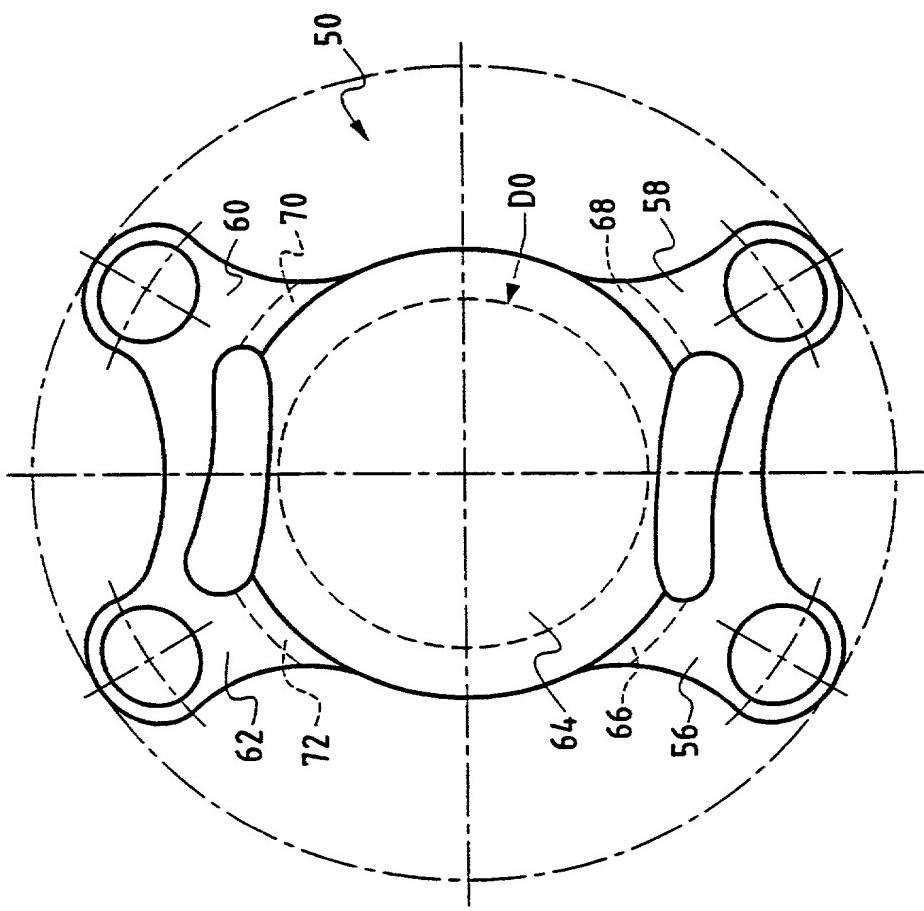
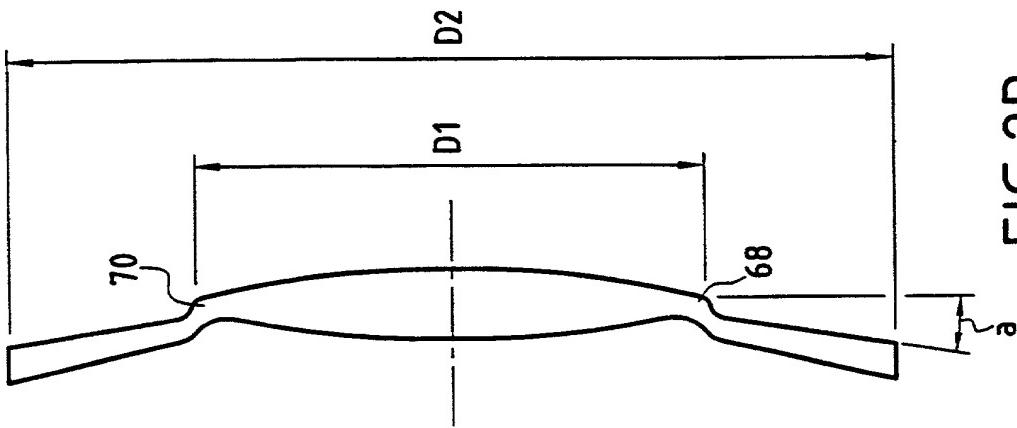


FIG.1C

3/3



10/29/01

Combined Declaration For Patent Application and Power of Attorney (Continued)

(Includes Reference to PCT International Applications)

By Express Mail
No. EL 793472389

I hereby claim the benefit under Title 35, United States Code, §120 of any United States application(s) or PCT international application(s) designating the United States of America that is/are listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in that/those prior application(s) in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, §1.56(a) which occurred between the filing date of the prior application(s) and the national or PCT international filing date of this application:

PRIOR U.S. APPLICATIONS OR PCT INTERNATIONAL APPLICATIONS DESIGNATING THE U.S. FOR BENEFIT UNDER 35 U.S.C. 120:

U S APPLICATIONS **STATUS (Check one)**

U S APPLICATION NUMBER	U S FILING DATE	PATENTED	PENDING	ABANDONED

PCT APPLICATIONS DESIGNATING THE U.S.

PCT APPLICATION NO	PCT FILING DATE	U S SERIAL NUMBERS ASSIGNED (if any)		

POWER OF ATTORNEY: As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith. (List name and registration number)

SEE OVERLEAF

Send Correspondence to:	COHEN PONTANI LIEBERMAN & PAVANE 551 Fifth Avenue Suite 1210 New York, New York 10176	Direct Telephone Calls to: (name and telephone number)
		(212)687 2770

201 202 203	FAMILY NAME BOS	FIRST GIVEN NAME Gilles	SECOND GIVEN NAME
RESIDENCE & CITIZENSHIP	CITY 74330 LA BALME DE SILLINGY - FRANCE	STATE OR FOREIGN COUNTRY FRANCE	COUNTRY OF CITIZENSHIP FRANCE
POST OFFICE ADDRESS	124 Route des Carasses	74330 LA BALME DE SILLINGY	STATE & ZIP CODE/COUNTRY FRANCE
FAMILY NAME GANTIN	FIRST GIVEN NAME Denis	SECOND GIVEN NAME	
RESIDENCE & CITIZENSHIP	CITY 74130 BONNEVILLE	STATE OR FOREIGN COUNTRY FRANCE	COUNTRY OF CITIZENSHIP FRANCE
POST OFFICE ADDRESS	Aubeterre, Ayze	74130 BONNEVILLE	STATE & ZIP CODE/COUNTRY FRANCE
FAMILY NAME	FIRST GIVEN NAME	SECOND GIVEN NAME	
RESIDENCE & CITIZENSHIP	STATE OR FOREIGN COUNTRY	COUNTRY OF CITIZENSHIP	
POST OFFICE ADDRESS	CITY	STATE & ZIP CODE/COUNTRY	

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

SIGNATURE OF INVENTOR 201 	SIGNATURE OF INVENTOR 202 	SIGNATURE OF INVENTOR 203
DATE OCTOBER 29, 2001	DATE OCTOBER 29, 2001	DATE

COMBINED DECLARATION FOR PATENT APPLICATION AND POWER OF ATTORNEY

(Includes Reference to PCT International Applications)

ATTORNEY'S DOCKET NUMBER

By Express Mail
No. EL 793472389

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name,

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

INTRAOCCULAR IMPLANT

the specification of which (check only one item below):

- is attached hereto.
- was filed as United States application

Serial No. _____

on _____,

and was amended

on _____ (if applicable).

- was filed as PCT international application

Number PCT/FR00/01940

on 6 JULY 2000,

and was amended under PCT Article 19

on _____ (if applicable).

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, §1.56(a).

I hereby claim foreign priority benefits under Title 35, United States Code, §119 of any foreign application(s) for patent or inventor's certificate or of any PCT international application(s) designating at least one country other than the United States of America listed below and have also identified below any foreign application(s) for patent or inventor's certificate or any PCT international application(s) designating at least one country other than the United States of America filed by me on the same subject matter having a filing date before that of the application(s) of which priority is claimed:

PRIOR FOREIGN/PCT APPLICATION(S) AND ANY PRIORITY CLAIMS UNDER 35 U.S.C. 119:

COUNTRY (if PCT, indicate "PCT")	APPLICATION NUMBER	DATE OF FILING (day, month, year)	PRIORITY CLAIMED UNDER 35 USC 119
FRANCE	99 08837	8 JULY 1999	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
			<input type="checkbox"/> YES <input type="checkbox"/> NO
			<input type="checkbox"/> YES <input type="checkbox"/> NO
			<input type="checkbox"/> YES <input type="checkbox"/> NO
			<input type="checkbox"/> YES <input type="checkbox"/> NO

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JC05 Rec'd PCT/PTC 10 DEC 2007

I hereby appoint the following attorneys and/or agents to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith:

MYRON COHEN, Reg. No. 17,358; THOMAS C. PONTANI, Reg. No. 29,763; LANCE J. LIEBERMAN, Reg. No. 28,437; MARTIN B. PAVANE, Reg. No. 28,337; MICHAEL C. STUART, Reg. No. 35,698; KLAUS P. STOFFEL, Reg. No. 31,668; EDWARD M. WEISZ, Reg. No. 37,257; CHI K. ENG, Reg. No. 38,870; JULIA S. KIM, Reg. No. 36,567; VINCENT M. FAZZARI, Reg. No. 26,879; ALFRED W. FROEBRICH, Reg. No. 38,887; ANDRES N. MADRID, Reg. No. 40,710; KENT H. CHENG, Reg. No. 33,849; GEORGE WANG, Reg. No. 41,419; JEFFREY M. NAVON, Reg. No. 32,711 and JOHN G. TUTUNJIAN, Reg. No. 39,405.